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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/987,486

11/15/2001

Kojiro Katayama

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09/08/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

WANG, LIANG CHE A

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,486	Applicant(s) KATAYAMA ET AL.	
	Examiner Liang-che Alex Wang	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,20,30 and 33-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,20,30 and 33-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 10, 20, 30, 33-53 are presented for examination.
2. Claims 10, 20, and 30 have been amended.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/01/2006 has been entered.

The New Grounds of Rejection

4. Applicant's amendment and argument with respect to claims 10, 20, 30, 33-53 filed on 8/1/2005 have been fully considered but they are deemed to be moot in views of the new grounds of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10, 20, 30, 33-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. Referring to claim 10, 20, and 30, line 4, "... can be replaced by a **new one**", the term "new one" renders the claim vague and indefinite. It is unclear what a new one is referred to.
8. All dependent claims are rejected to as having the same deficiencies as the claims they depend from.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
10. Claims 10, 20, 30, 33-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanaya et al, US Publication Number 2002/0140748, hereinafter Kanaya, in views of Kobayashi et al., US Patent Number 6,338,539, hereinafter Kobayashi.
11. Referring to claim 10, Kanaya teaches an inventory management system that manage an inventory of an expendable (see title of Kanaya, and figure 15 shows an inventory of an expendable, the examiner corresponds a ink reservoir of an ink as an inventory of an expendable) comprising:
 - a. a first storage unit (items 62, 63, figure 10, page 8 [0098]), adapted to store inventory information indicating an inventory number of an expendable which is mounted in a printer (page 6 [0098]) and can be replaced by a new one (ink cartridge is replaceable), the inventory number being subtracted based on replacement of the expendable in the printer (page 4 [0036] lines 10-13, quantity

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of ink remaining in an ink reservoir is recorded, and it is inherent that when the inventory number (amount of ink in the ink reservoir) of the expendable (ink cartridge) is subtracted based on replacement (the space of the occupied ink is replaced) of the expendable in the printer, when then ink is consumed);

- b. a receiver unit, adapted to receive absence information indicating that the inventory number of the expendable is zero or less than a predetermined number (page 11 [0135] lines 12-17; [0032] lines 2-5);
- c. an instruction unit, adapted to provide, to an external apparatus via a communication line a instruction for expendable (page 4 [0032] lines 7-9, printer give alarm to another apparatus); and
- d. an alarm sending unit (page 4 [0032]), adapted to send an alarm to the external apparatus via the communication line (page 4.[0032] lines 7-9, printer give alarm to another apparatus) based on the history information stored in said second storage unit and a new reception of the absence information received by said receiver unit, after said instruction unit provide the instruction (page 4 [0032-0034] alarm is given when the predetermined capacity of the ink reservoir become not greater than a predetermined value, so a new ink cartridge can be installed).

Kanaya does not teach a delivery instruction for delivery of a new expendable to the printer and a second storage, adapted to store history information indicating a history of the delivery instruction provided by said instruction unit.

However, Kobayashi teaches a delivery instruction for delivery of a new expendable to the printer (Col 5 lines 25-28, abstract, instruction is issued when replacement of ink is needed) and a second storage, adapted to store history information

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indicating a history of the delivery instruction provided by said instruction unit (step 187 in figure 12 and step 211 in figure 17, ink replacement is stored).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate the ink cartridge replacement instruction and the storage means to store delivery instruction such that to have delivery instruction for delivery of a new expendable to the printer and a second storage, adapted to store history information indicating a history of the delivery instruction provided by said instruction unit because both Kobayashi and Kanaya teaches monitoring ink residual of a printer.

A person with ordinary skill in the art would have been motivated to make the modification to Kanaya because having the replacement instruction and the storage means for storing history of delivery instruction would prevent the user erroneously select the ink cartridge as taught by Kanaya.


12. Referring to claim 33, Kanaya as modified further teaches a system according to claim 10, wherein the inventory information stored by said first storage unit can be monitored by an external apparatus (page 6 [087] lines 5-8, computer 80 corresponds to external apparatus).
13. Referring to claim 34, Kanaya as modified further teaches a system according to claim 10, wherein the inventory information can be monitored by a browser provided in the external apparatus (page 6 [0087] lines 5-8, and figure 2), and said first storage unit is able to output display information enabling the browser to monitor the inventory information (figure 15 page 4 [0036-0037]).
14. Referring to claim 35, Kanaya as modified further teaches a system according to claim 33, wherein said first storage unit stored the inventory information for each one of a


plurality of expendable types, and the inventory information can be monitored for each expendable type by the external apparatus (see figure 15).

15. Referring to claim 36, Kanaya as modified further teaches a system according to claim 35, wherein said second storage unit stores the history information for each one of the plurality of expendable types so as to show that the delivery instruction has been provided for each expendable type by the external apparatus (page 6 [0087] lines 5-8.)
16. Referring to claim 37, Kanaya as modified further teaches a system according to claim 36, further comprising an order reception unit adapted to receive an order for an expendable of any one of the plurality of expendable types from the external apparatus, wherein the external apparatus is provided with an order placement display screen having a plurality of order placement sections for respective ones of the plurality of expendable types and wherein each order placement section is activated or inactivated in accordance with the inventory number of expendable for a expendable type corresponding to the order placement section (page 11 [0135], green to light to demand replacement of ink cartridge).
17. Referring of claim 38, Kanaya as modified further teaches a system according to claim 10, wherein the expendable is toner or ink (see title).
18. Referring to claim 39, Kanaya as modified further teaches a system according to claim 10, wherein the absence information indicates that a remaining amount of an expendable is at a low lever (page 1 [0002].)
19. Referring to claims 20, 40-46, and 30, 47-53. Claims 20, 40-46, and 30, 47-53 encompass the same scope of the invention as that of the claims 20, 33-39. Therefore, the claims 20, 40-46, and 30, 47-53 are rejected for the same reason as the claims 20, 33-39.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (571)272-3992. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.
21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Liang-che Alex Wang 
August 30, 2006


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER